

Find a Corresponding Node of a Binary Tree in a Clone of That Tree

[\(View\)](#)

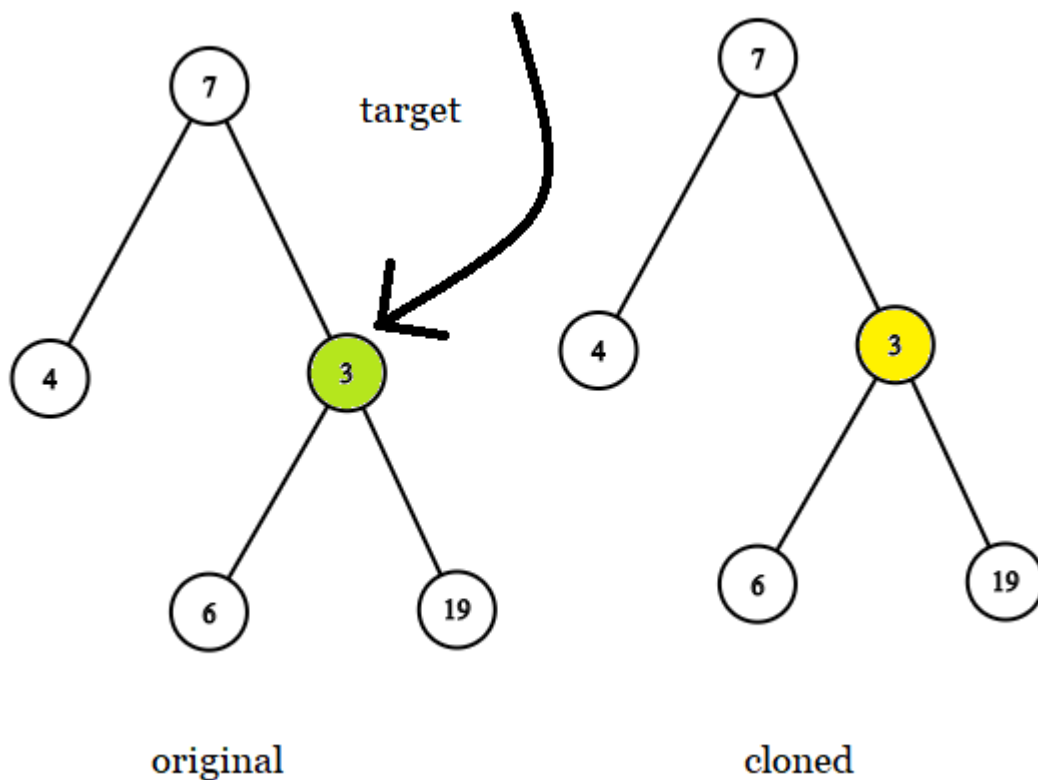
Given two binary trees `original` and `cloned` and given a reference to a node `target` in the original tree.

The `cloned` tree is a **copy of** the `original` tree.

Return *a reference to the same node* in the `cloned` tree.

Note that you are **not allowed** to change any of the two trees or the `target` node and the answer **must be** a reference to a node in the `cloned` tree.

Example 1:

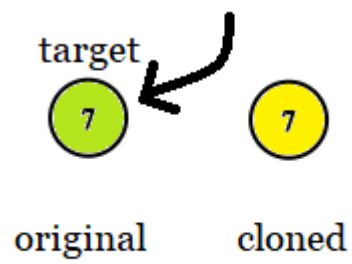


Input: `tree = [7,4,3,null,null,6,19]`, `target = 3`

Output: 3

Explanation: In all examples the original and cloned trees are shown. The target node is a green node from the original tree. The answer is the yellow node from the cloned tree.

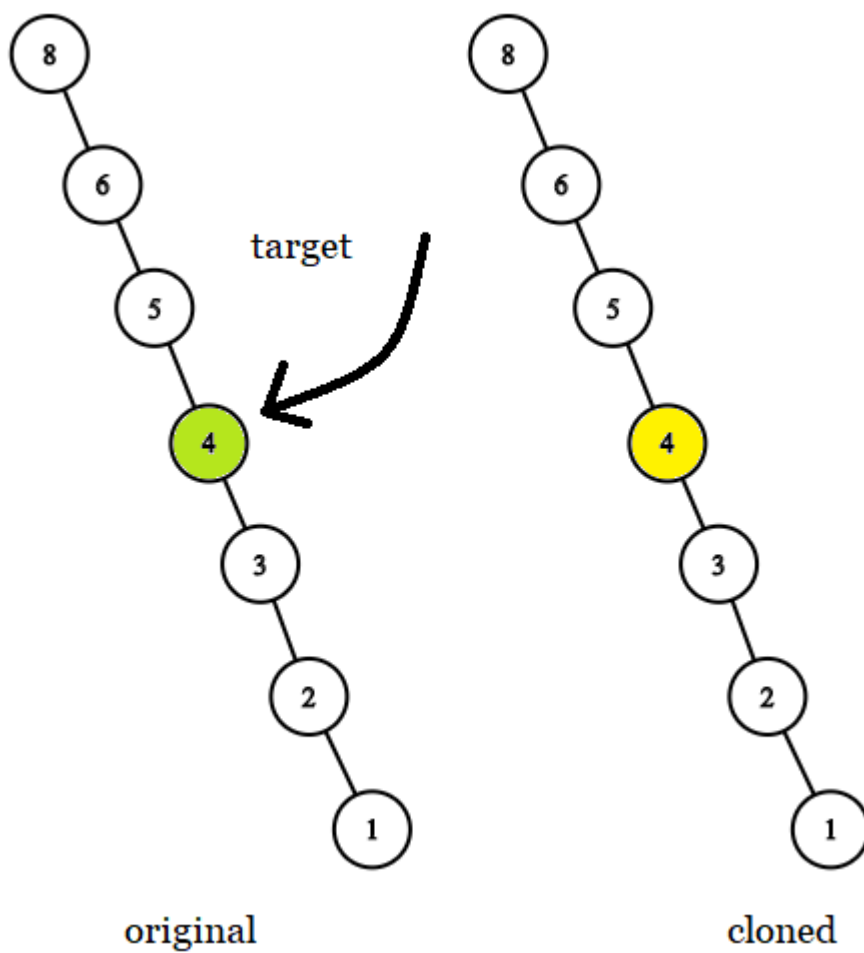
Example 2:



Input: tree = [7], target = 7

Output: 7

Example 3:



Input: tree = [8,null,6,null,5,null,4,null,3,null,2,null,1], target = 4

Output: 4

Constraints:

- The number of nodes in the `tree` is in the range `[1, 104]`.
- The values of the nodes of the `tree` are unique.
- `target` node is a node from the `original` tree and is not `null`.

Follow up: Could you solve the problem if repeated values on the tree are allowed?